

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE JOINT)
APPLICATION OF QUESTAR GAS)
COMPANY, THE DIVISION OF PUBLIC)
UTILITIES, AND UTAH CLEAN ENERGY,)
FOR THE APPROVAL OF THE)
CONSERVATION ENABLING TARIFF)
ADJUSTMENT OPTION AND ACCOUNTING)
ORDERS)

Docket No. 05-057-T01

Surrebuttal Testimony of

Howard Geller

on behalf of

**Southwest Energy Efficiency Project (SWEEP) and
Utah Clean Energy (UCE)**

August 14, 2006

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Introduction

Please state your name and business address.

A. My name is Howard Geller. My business address is 2260 Baseline Rd. Suite 212, Boulder, Colorado 80302.

For whom are you testifying?

A. I am testifying on behalf of the Southwest Energy Efficiency Project and Utah Clean Energy (SWEEP/UCE).

Did you testify previously in this docket?

A. Yes, I submitted direct testimony on January 23, 2006. I submitted my professional qualifications with that testimony.

What is the purpose of your surrebuttal testimony?

A. In my testimony I will respond to criticisms of the natural gas demand-side management (DSM) proposal and the decoupling proposal of the joint applicants made by witnesses Dismukes, Higgins, and Wolf.

Q. Do you agree with Dr. Dismukes regarding the potential to implement gas DSM programs that do not result in a loss of sales revenue?

A. Dr. Dismukes claims starting on p. 10 of his rebuttal testimony that DSM measures do not necessarily result in lost sales and lost revenues. In this regard, he points to load management programs that shift energy usage from peak to off-peak periods.

25 But his discussion here is relevant to electricity DSM programs, not natural gas DSM
26 programs. While there are electricity DSM programs that result in a shift in electricity
27 use from peak to off-peak periods, there are no natural gas load shifting programs as
28 far as I know. All ten of the utilities with natural gas DSM programs that I referred to
29 in Exhibit HG-2 of my direct testimony have achieved gas savings from their gas
30 DSM programs, meaning the programs reduce revenues in the short run.

31

32 **Q. Does Dr. Dismukes suggestion on p. 11 of his testimony that the Commission**
33 **require the Company to promote only load management programs that reduce**
34 **peak usage but not total gas usage makes sense?**

35 A. No it does not. As explained above, gas DSM programs result in reduced natural gas
36 use, not load shifting from peak to off-peak periods.

37

38 **Q. Do you agree with Dr. Dismukes (pp. 12-13) that the Ratepayer Impact Measure**
39 **(RIM) test is an appropriate cost effectiveness test for the Commission to**
40 **consider for evaluating the cost effectiveness of potential DSM programs?**

41 A. No, I do not. The Total Resource Cost (TRC) test should be used as the primary test
42 for determining DSM program cost effectiveness. This test indicates whether or not
43 DSM program provide benefits that exceed costs to society (not including
44 environmental and other externalities) as a whole, and therefore contribute to least
45 cost energy services. It is the primary test used in Utah for evaluating the cost
46 effectiveness of electricity DSM programs (as well as the primary test used for most
47 utility companies across the country), and it should be used in the same way for
48 natural gas DSM programs.

49

50 **Q. Do you agree with Dr. Dismukes equity concerns (pp. 38-41)?**

51 A. Dr. Dismukes has raised a number of issues that may not in fact be present if and
52 when the CET is adopted and gas DSM programs are implemented. He first raises the
53 possibility of narrowly defined DSM programs that do not give all customers the
54 opportunity to participate. But the CET by nature does not encourage narrowly
55 defined DSM programs. In fact, I believe the CET encourages the Company to
56 implement well-funded, broadly based DSM programs because it protects the
57 Company from net revenue loss as such programs are implemented. Dr. Dismukes
58 also raises the possibility of customers who have implemented all available energy
59 efficiency measures already and therefore would not have the ability to participate in
60 gas utility DSM programs. But he provides no evidence that such customers exist in
61 the Questar Gas Company service area, or the prevalence of such customers if they do
62 exist.

63

64 **Q. Do you agree with Dr. Dismukes that performance standards and incentives (pp.**
65 **48-51) are an important part of DSM programs?**

66 A. I would agree with Dr. Dismukes that performance standards and incentives can be
67 valuable mechanisms for stimulating effective utility DSM programs. Dr. Dismukes
68 provides a number of examples of states where this is the case, and there are others
69 such as Minnesota. But I would not go so far as to state that performance standards
70 and incentives are an essential part of DSM programs, and I would note that
71 PacifiCorp (Rocky Mountain Power) does not have performance standards or

72 incentives and in spite of this is implementing a set of well-funded, broad-based, and
73 cost-effective DSM programs in the state.

74

75 **Q. Do you agree with Dr. Dismukes comments (pp. 59-60) about Commission**
76 **approval of cost recovery for DSM programs?**

77 A. Dr. Dismukes reviews and suggests use of the Commission approval process for
78 DSM programs implemented by PacifiCorp in Utah. I agree that this process is
79 working well and would be appropriate for natural gas DSM programs, if Questar Gas
80 Company proceeds with such programs. The Commission, not the DSM Advisory
81 Group, should have ultimate authority for approving implementation of gas DSM
82 programs. However, the DSM Advisory Group, which includes Commission Staff
83 members, is an appropriate vehicle for making recommendations to the Company for
84 potential new or modified DSM programs.

85

86 **Q. Would you like to comment on the alternative DSM incentive proposals**
87 **recommended by Dr. Dismukes in his supplemental rebuttal testimony?**

88 A. Yes I would. Dr. Dismukes's first proposal is for a potential incentive/penalty based
89 on the cost effectiveness of DSM programs, and his second option is for a potential
90 incentive/penalty based on the level of natural gas savings resulting from these
91 programs. As I stated above, I believe that these types of incentive/penalty
92 mechanisms can be valuable but should be viewed as complements to and not
93 replacements for decoupling. Furthermore, I believe an incentive/penalty provision
94 based on energy savings is preferable to one based on program cost effectiveness.
95 Basing the incentive/penalty on overall cost effectiveness would tend to drive Questar

96 Gas towards programs that have a very high benefit-cost ratio and away from
97 programs that are less cost effective, such as residential programs in general and
98 programs for low-income households in particular. This is not good public policy in
99 my view. I believe that encouraging maximum cost-effective energy savings is a
100 better approach, and would be accomplished if the incentive/penalty (should one be
101 adopted) be based on energy savings achieved.

102

103 Dr. Dismukes's third alternative is termed a statistical re-coupling approach. It is a
104 modification of full revenue decoupling as proposed by the joint applicants. While I
105 continue to support and recommend adoption of full revenue decoupling (i.e., the
106 proposed CET), I do not object to a form of statistical re-coupling should the
107 Commission prefer this approach. In particular I would not object to adjusting the
108 true-up amounts for either changes in natural gas prices or economic growth, relative
109 to those assumed in the projection of future gas sales and revenue. However, I object
110 to including an adjustment for "customer-initiated efficiency" as suggested by Dr.
111 Dismukes. Such energy savings result from a wide range of factors including building
112 energy codes, appliance efficiency standards, and changes in consumer behavior. It is
113 difficult to separate the energy savings resulting from these factors from the savings
114 from utility energy efficiency programs. Furthermore, Questar should not face less
115 recovery of fixed costs if it contributes to the success of codes and standards or
116 changes in consumer behavior that lead to greater conservation, for example through
117 education and training initiatives.

118

119

120 **Q. What issues raised by Mr. Higgins do you wish to respond to?**

121 A. Mr. Higgins notes on page 12 of his testimony that average gas usage per customer
122 declined about 36 percent from 1980 through 2005, and he states, “Clearly, customers
123 have been reducing their gas usage over a sustained period of time, despite the
124 utility’s apparent disinclination to encourage conservation.”

125

126 **Q. What response do you have to this statement?**

127 A. Declining natural gas usage per customer has occurred over the past 25 years for a
128 number of reasons some of which are a result of conscious decisions by customers but
129 others are not. For example, one of the reasons gas usage is declining is because the
130 federal government adopted minimum efficiency standards on natural gas furnaces
131 and water heaters. New furnaces and water heaters are more efficient than older
132 furnaces and water heaters that have been wearing out, irrespective of whether or not
133 consumers seek efficient products. Likewise, building energy codes in Utah have
134 been strengthened over time. New homes are more efficient than older homes; e.g.,
135 they are built tighter and have higher levels of insulation, due to this public policy.

136

137 **Q. Can you provide any insight to the various drivers of the past decline in usage
138 per customer?**

139 A. Yes. I would say the reasons for past declines are: 1) new appliance efficiency
140 standards; 2) improved building codes; 3) voluntary customer adoption of building
141 and equipment efficiencies that exceed minimum codes and standards; 4) customer
142 conservation through behavioral changes such as lower thermostat settings in the
143 winter, in part motivated by rising natural gas prices; and 5) demographic changes

144 such as declining average household occupancy levels over time. However, I have not
145 analyzed the relative magnitude of each of these effects.

146

147 **Q. Is there additional potential for future declines in usage per customer?**

148 A. Yes. As I indicated in my direct Testimony, the GDS study shows a potential for
149 20% gas savings at the end of the 10-year implementation period, assuming
150 widespread adoption of all cost-effective gas savings measures. This study is
151 thorough and well-grounded in my view.

152

153 **Q. What is the implication of this situation for the decoupling proposal put forward**
154 **by the joint applicants?**

155 A. Decoupling as proposed by the joint applicants will compensate the utility for losses
156 in the utility's authorized fixed cost recovery due to conservation efforts of all
157 types—those resulting from appliance efficiency standards, building energy codes,
158 customer response to rising gas costs, or company-sponsored DSM programs.

159

160 **Q. Is it reasonable to compensate the utility in this manner?**

161 A. Yes, this is fair and reasonable in my view. I do not think the gas utility should be
162 financially penalized due to conservation efforts resulting from federal policy, state
163 policy, or its own conservation programs. Federal and state codes and standards are
164 generally outside the scope of a gas utility's normal business operations, although
165 some utilities, such as Questar Gas, support the adoption and implementation of
166 effective codes and standards as part of their DSM efforts, for example by supporting
167 the adoption of new appliance efficiency standards or by educating and training

168 builders on ways to comply with new energy codes. It is important to ensure that
169 utilities are not financially penalized if they support the adoption and implementation
170 of cost-effective codes and standards (just as it is important to ensure they are not
171 penalized if they implement effective DSM programs), and decoupling as proposed
172 by the joint applicants will achieve this outcome.

173

174 **Q. What issues raised by Ms. Wolf do you wish to respond to?**

175 A. Ms. Wolf raises a number of issues related to energy consumption, energy efficiency,
176 and low-income households. On page 14 she states that low-income households will
177 be hurt if they face higher rates due to decoupling but only get limited additional
178 assistance from the proposed \$250,000 contribution to the state's low-income
179 weatherization program. But she does not acknowledge that there could be other ways
180 that low-income households could benefit from natural gas DSM programs enabled
181 by decoupling as proposed by the joint applicants. For example, the Joint Application
182 states that during the Pilot Program the Company will consider programs that involve
183 education and provision of low-cost efficiency measures to a large number of low-
184 income households. Examples include distribution of low-cost conservation
185 measures such as low-flow showerheads and faucet aerators for free to low-income
186 households. Or the utility could offer to pay for most or all of the cost of other
187 conservation measures, such as programmable thermostats or insulation, purchased
188 by low-income households. In other words, it is not reasonable to conclude that low-
189 income households, as a class, will be automatically harmed by utility DSM programs
190 and the proposed CET policy.

191

192 **Q. What about the issue of timing of decoupling and gas DSM programs raised by**
193 **Ms. Wolf?**

194 A. Ms. Wolf on p. 15 of her testimony objects to enacting decoupling before actually
195 starting gas DSM programs. She advocates first developing cost-effective energy
196 efficiency programs that are ready to be implemented before the issue of utility
197 incentives and disincentives is addressed. In my view this concern has merit although
198 it appears to be overly negative. I believe that Questar Gas Company is making a
199 good faith effort to develop a robust set of gas DSM programs in a timely manner, as
200 evidenced by the preparation of the DSM Market Characterization Report and draft
201 DSM Plan Outline. I believe that Questar will move forward with program
202 implementation, if such programs are approved by the Commission, in a timely
203 manner should the proposal of the joint applicants be approved. If this is the case, I
204 believe there is a high likelihood that customers as a whole will benefit through lower
205 net energy service costs, based on the experience of other utilities that have
206 implemented gas DSM programs.

207

208 **Q. What do you recommend the PSC do with respect to the issue of timing of**
209 **decoupling and gas DSM programs?**

210 A. Adopting decoupling first as a way to enable gas DSM programs to go forward is a
211 reasonable proposition in my view. However, I also think it would be reasonable for
212 the Commission to order the utility to come forward with specific and comprehensive
213 DSM program proposals within a set period of time, say within two to three months
214 of issuing its order approving decoupling. This would provide additional assurance
215 that Questar Gas Company will fulfill its pledge to move ahead with gas DSM

216 program development and implementation in a timely manner if decoupling is
217 approved.

218

219 **Q. What other benefits could result from approval gas decoupling and gas DSM**
220 **programs?**

221 A. The reduction in aggregate demand for natural gas through adoption of energy
222 efficiency measures will put downward pressure on natural gas commodity prices.
223 Studies by both the American Council for an Energy-Efficient Economy (ACEEE)
224 and Lawrence Berkeley National Laboratory confirmed that reduced gas demand will
225 have this effect and demonstrated how significant it could be at the national level.¹

226

227 **Q. What about Ms. Wolf's contention, referring to my direct testimony, that gas**
228 **utilities with decoupling mechanisms invest among the smallest amounts in gas**
229 **DSM programs as a fraction of their retail sales revenue?**

230 A. Ms. Wolf makes this comment at the top of p. 18 of her testimony. But this is not a
231 correct interpretation of the information I presented and referred to in my direct
232 testimony. My testimony on p. 13 pointed out that the SWEEP survey of gas utility
233 DSM programs found that utilities that have decoupling mechanisms or are eligible
234 for shareholder incentives tend to spend more on gas DSM programs than utilities
235 without these policies. Furthermore, the SWEEP survey pointed out that the three
236 utilities with decoupling (Northwest Natural Gas, PG&E, and SoCal Gas) have been

¹ R.N. Elliott and A.M. Shipley. *Impacts of Energy Efficiency and Renewable Energy on Natural Gas Markets: Updated and Expanded Analysis*. Washington, DC: American Council for an Energy-Efficient Economy, April 2005. R. Wiser, M. Bolinger, and M. St. Clair. *Easing the Natural Gas Crisis: Reducing Natural Gas Prices through Increased Deployment of Renewable Energy and Energy Efficiency*. LBNL-56756. Berkeley, CA: Lawrence Berkeley National Laboratory. Jan. 2005.

237 or are now expanding their DSM programs substantially relative to the funding level
238 in the year (2004) for which data were collected and reported in the SWEEP survey.

239

240 **Q. Can you provide further data substantiating this point?**

241 A. Yes I can. In California, where decoupling has been adopted, gas utilities are
242 expanding their DSM programs very rapidly. The three gas utilities (PG&E, SoCal
243 Gas Co., and San Diego Gas & Electric) combined spent approximately \$46 million
244 on gas DSM programs in 2004, \$66 million in 2005, and are projected to spend \$90
245 million on these programs in 2006.²

246

247 **Q. Does this conclude your testimony?**

248 A. Yes it does.

249

² Data based on California Public Utilities Commission Decisions 03-12-060, 04-12-049, 05-05012; CPUC draft decision A.05-06-004; and utility applications A.05-06-004, A.05-06-011, A.05-06-015, and A.05-06-016.